



UMTA

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DPM Program Policy Statement

ABSTRACT

This Policy Statement sets forth the Department's policy with regard to investment in DPM projects, deployment of multiple technologies and fiscal controls to be applied.

POLICY ON DOWNTOWN PEOPLE MOVERS

The Department's Downtown People Mover (DPM) Demonstration Program has undergone a number of changes since its initiation on April 5, 1976. While the initial goals and objectives of the program remain unchanged, the number of participating demonstration cities has changed as a result of Congressional direction. Further, the Department of Transportation has determined that the DPM program should result in the deployment of multiple technologies and that fiscal controls should be placed on the program to contain cost. The purpose of this policy statement is to concisely state the Department's policy with regard to: investment in DPMs, deployment of multiple technologies and fiscal controls.

A. Background

On April 5, 1976, the Department announced the initiation of the DPM demonstration program. On December 22, 1976, the Department completed its review of the thirty-eight project proposals submitted and announced its selection of Cleveland, Houston, Los Angeles and St. Paul as demonstration cities. Based upon estimates at the time, \$220 million in Federal funds would be required to implement the DPM systems in these four cities. In addition, Detroit, Baltimore and Miami were advised that their DPM proposals were of sufficient merit to permit their funding from existing Federal transit commitments to those cities, provided the cities chose to request such action and subject to specific conditions established by UMTA for each city.

Subsequently, Congress advised (through the Conference Report (HR 7757) on the Department's Fiscal Year 1978 Appropriations) that in addition to the above cities, UMTA should consider funding additional DPM projects in the cities of Jacksonville, St. Louis, Baltimore and Indianapolis. The Congressional direction, however, did not provide any funding for these added DPM projects. Upon further review of the merits of the finalists proposals, the Department determined that Baltimore, Indianapolis, Jacksonville, Norfolk and St. Louis could be awarded technical study grants, if these cities applied, to perform feasibility studies to further refine their proposed projects.

As a result of the evaluation process and criteria by which the DPM demonstration cities were selected by the Department and/or designated by Congress, the prior planning efforts of the participating cities are recognized as meeting the requirements for the transportation alternative analysis normally required for a major transit construction project. Other statutory requirements for capital assistance on major transit investments remain applicable to the DPM program.

After reviewing local needs, Baltimore decided that it could not divert sufficient funds from its rapid rail project and elected instead to proceed with a technical feasibility study. In addition, Cleveland's Mayor requested the withdrawal of the Cleveland DPM project grant application and elected not to participate in the program. The cities of Detroit and Miami elected to proceed with their respective DPM projects under previously committed funds. Subsequently, Houston elected to terminate its DPM preliminary engineering activities and withdrew from the demonstration program.

B. Investment in DPMs

The Department's policy with regard to present and future DPM investments is as follows:

(1) First Tier DPM Cities:

The first tier DPM cities are divided into two categories:

- (a) Tier I. The cities of Los Angeles and St. Paul are the remaining demonstration projects in this category from those selected in the December 22, 1976 announcement. They have been awarded capital grants to conduct their Phase I DPM efforts, preliminary engineering. Award of a Section 3 capital grant to either of these cities for Phase II, project construction, will depend upon the following factors:
- o Availability of Federal funds;
 - o Satisfactory cost and project viability results from the preliminary engineering efforts of that city; and
 - o Successful completion of all grant statutory requirements by that city, including securing the local share and obtaining all required environmental clearances.

The Federal commitment to these Tier I DPM demonstration projects is \$220 million, as announced on December 22, 1976.

- (b) Tier IA. The cities of Detroit and Miami are to be funded in accordance with normal Section 3 new start category procedures. These cities have been awarded capital grants to conduct their Phase I DPM efforts, preliminary engineering. Award of a Section 3 capital grant to either of these cities for Phase II, project construction, will depend on the following factors:

- o Availability of Federal funds;
- o Satisfactory cost and project viability results from the preliminary engineering efforts of that city;
- o Successful completion of all grant statutory requirements by that city, including securing the required local share and obtaining all required environmental clearances; and
- o Meeting any specific conditions required by UMTA as a prerequisite for participation in the DPM program.

Federal funding for the Detroit DPM will come from the \$600 million overall commitment made to Detroit by the Department in October 1976 to meet its regional transportation needs. In the event that St. Paul drops out of the DPM demonstration program, Detroit will be designated as a Tier I replacement to permit the demonstration of operational capabilities of a DPM in a cold weather city. In this event, funds for the Detroit project would come from within the \$220 million commitment for Tier I demonstration projects.

UMTA has made a written commitment to Miami for \$19.2 million for their DPM, as part of the Agency's fixed guideway commitment to them. In the event that additional authorizations are enacted, UMTA may commit additional funds, bringing the total DPM commitment for Miami to approximately \$50 million. To complete the entire basic loop of 1.9 miles of double lane guideway, Miami has indicated its willingness to overmatch the Federal share.

(2) Second Tier DPM Cities:

The cities of Baltimore, Indianapolis, Jacksonville, Norfolk and St. Louis have been awarded technical studies grants to conduct feasibility studies and to further refine their DPM projects. If the results of these technical studies so warrant, grants for Phase I, preliminary engineering, will be provided upon proper application and the successful completion of all statutory requirements. Award of preliminary engineering grants for these projects does not imply a Federal commitment to fund construction. Construction funding of any of these Tier II projects will be provided from the Section 3 new start category and will depend on the following factors:

- o Availability of Federal funds;
- o Satisfactory cost and project viability results from the preliminary engineering efforts of that city;
- o Successful completion of all grant statutory requirements by that city, including securing the local share and obtaining all required environmental clearances; and
- o An indication that sufficient progress has been made with the implementation of the Tier I projects to permit evaluation of the DPM concept.

(3) Other DPM Projects:

With regard to Federal funding of additional cities beyond the Tier I and Tier II DPM cities, UMTA will require such cities to conduct an analysis of transportation alternatives prior to any submittal of an application for capital grant assistance. Further, UMTA will require such cities to await the successful operation of at least one of these initial demonstration projects with favorable results before authorizing capital investment of any additional city beyond those above.

C. Deployment of Multiple Technologies

It is UMTA's objective to derive maximum benefit from the Downtown People Mover demonstrations by assuring that a representative spectrum of present technologies are deployed. At present there are more than five manufacturers who could supply DPM systems for these DPM deployments, with each capable of performing one or more of the DPM projects. To ensure that these projects result in the demonstration of different technologies and to ensure that after these DPM projects are completed a viable and competitive set of DPM suppliers remain available for future DPM deployments, UMTA will require that the first three of the DPM demonstration projects deploy three different technologies. The areas where these technological distinctions are sought include, but are not limited to: (1) vehicles - size, propulsion, braking and suspension; (2) guideways - dimensions, construction methods and materials; and (3) communications and control-control system design approach, switching, training, stopping and service characteristics.

UMTA will, therefore, require that the DPM grantees include the following procurement qualification in their system procurement bid packages for the selection of system suppliers:

- (1) For the first site ready for deployment, the system suppliers may propose any available technology;
- (2) For the second site ready for deployment, the system suppliers may propose any available technology except the technology previously selected for the first site;
- (3) For the third site ready for deployment, the system suppliers may propose any available technology except the technologies previously selected for the first and second DPM sites; and
- (4) For the fourth and subsequent sites, the system suppliers may propose any available technology.
- (5) For all sites, procurement bid packages will include a number of evaluation factors which will place emphasis on experience in manufacturing and installing an operational people mover system, such that it would be highly unlikely that a system not already in operation would be selected. Life cycle cost will also be an evaluation factor.

The above procurement qualification is necessary to assure the achievement of National objectives of the DPM program. Such an approach conforms to the Congressional intention that DPM demonstration projects should "...employ various types of systems so that appropriate comparison can be made of different technologies." (1) All qualified manufacturers will have an opportunity to compete on each procurement. No technology is excluded unless that technology has been already selected for one of the first two demonstration sites and any proven technology may be offered for the fourth and subsequent sites.

D. Fiscal Controls

The Department has determined that fiscal controls must be placed on the DPM program to ensure that the capital cost of any DPM project does not become open ended. As a matter of policy UMTA requires other fixed guideway capital assistance projects to include a "full funding" limit as part of the grant contract to establish the maximum Federal contribution towards the capital cost of the project. This "full funding" limit may be raised to account for unusual cost-of-living index escalations or Acts of God. Such a fiscal control approach is not appropriate for the DPM program due to the program's demonstration nature and due to certain constraints placed by the Department on the DPM cities during the Phase I - Preliminary Engineering. These constraints include:

(1) House Report No. 95-383 on DOT and Related Agencies Appropriations Bill for Fiscal Year 1978, Page 41, dated June 2, 1977.

- o Specification resulting from the preliminary engineering is a performance specification;
- o The grantee cannot preselect a system technology;
- o The government desires to implement multiple system technologies;
- o Due to the above requirements, at the end of preliminary engineering, the grantee does not have a firm estimate on a specific system but only a working estimate that is a composite of available system data.

The Department has determined that a "modified full funding" limit be established to define the maximum contribution of the Federal government and to provide incentive to the cities to keep costs reasonable and under control. Under this "modified full funding" limit approach the maximum Federal contribution will be determined as follows:

- (1) Upon the successful completion of preliminary engineering and the completion of all statutory requirements including the securing of local share and obtaining environmental clearances, a preliminary "modified full funding" limit for the Phase II - Construction contract will be established. This funding limit will be subdivided as follows:
 - (a) City/Grantee - costs associated with city/grantee activities, such as project management and administration, subterranean preparation, street and utility relocation, special construction for joint development, initial start-up operations, etc.;
 - (b) Turnkey Contractor Activity
 - (b.1) Hardware - costs associated with the turnkey contractor's activities for such items as systems engineering, integration, test and acceptance, vehicles, communications and control, maintenance facilities and equipment, initial operations, training, manuals, etc.;
 - (b.2) (Selected) System Specific A&E Design - costs associated with the turnkey contractor's activities for civil design for such items as guideways, stations, maintenance and central control facilities, electrification and guideway heating (if required), etc.; and

- (b.3) "Brick and Mortar" - costs associated with the turnkey contractor's activities for civil construction for such items as guideways, stations, maintenance and central control facilities, electrification and guideway heating (if required), etc.
- (2) Upon the selection of the turnkey system supplier, the initial capital grant set aside limit for D(1)(b) (Turnkey Contractor Activity) may be revised upwards to a maximum of 10% or downward, based on actual negotiated contract cost.
- (3) Upon the completion of the system specific final design and receipt of civil construction bids (fixed price), the capital grant set aside limit for D(1)(b.3) ("Brick and Mortar") may again be revised upwards to a maximum of 10% or downwards, based on the lowest construction bids. This revised limit will become the "modified full funding" limit that represents the maximum Federal contribution to the DPM project.
- (4) If during the course of the Phase II (Construction), UMTA determines that an added scope activity is required in the system supplier hardware contract (for Item D(1)(b.1) above) to assure improved safety or probability of successful operation over and above the contracted performance, the "modified full funding" limit for D(1)(b.1) (Hardware) may be revised upwards to a maximum of 10%. UMTA will budget the reserve funds required for these potential UMTA-directed discretionary changes.
- (5) The "modified full funding" limit may also be adjusted to account for unusual cost-of-living index escalation, Acts of God, extraordinary costs due to compensation in eminent domain takings, or costs directly caused by Federal legislation or regulations where the effective date of the legislation or regulations is after the Phase II, Construction grant award.

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